## ORNL GEN PATENT COUNSEL

865 574 0381 P.02/02

PART B - FEE(S) TRANSMITTAL

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or Fax

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks I through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

24298

7590

05/06/2004

UT-Battelle, LLC 111 Union Valley Rd. PO Box 2008, Mail Stop 6498 Oak Ridge, TN 37831

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.

abeth Warfield (Signature 18,02004 (Date) Mav

	FILING DATE	PIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
APPLICATION NO.	FILING DATE		4400.4	4945
10/618.372	07/11/2003	John Sheungchun Hsu	1193.1	4743

TITLE OF INVENTION: METHODS AND APPARATUS FOR THERMAL MANAGEMENT OF VEHICLE SYSTEMS AND COMPONENTS

APPLN, TYPE	SMALL ENTITY	ISSUE FE	E PLIE	LICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330		\$300	\$1630	08/06/2004
nonprovisional					<del></del>	
EXAMDIER		ART UN	IT CL	LSS-SUBCLASS		
TAPOLCAI, WILLIAM E		3744		062-259200		
CFR 1.30.3).  Change of correspont Address form PTO/SB/  "Fee Address" indicat PTO/SB/47; Rev 03-02 Number Is required.	tion (or "Fee Address" Indica or more recent) attached. U	Correspondence ation form se of a Customer	2. For printing on a names of up to 3 agents OR, alternation (having as a agent) and the namattorneys or agents will be printed.	registered pate tively, (2) the re- number a register tes of up to 2 r , If no name is	nt attorneys or 1 K12 K ame of a single cred attorney or 2 egistered patent	A. Wilson
3. ASSIGNEE NAME AN PLEASE NOTE: Unleaded previously submit (A) NAME OF ASSIGN UT-Battelle.	NEE	elow, no assignee d	the PATENT (print of the will appear on the parate cover. Completi 3) RESIDENCE: (CIT) Oak Ridge	patent. Inclusion on of this form is and STATE OF		riate when an assignment signment.
Please check the appropria	le assignee category or categ		_		O corporation or other private	group entity O governs
4a. The following fec(s) ar	e enclosed:	40		unt of the fee(s)	is enclosed.	
Calssue Fee			☐ A check in the amount of the fee(s) is enclosed. ☐ Payment by credit card, Form PTO-2038 is attached.			
Publication Fee	f Copies		The Director is hereby authorized by charge the required fee(s), or credit any overpayment Deposit Account Number 13-1958 (enclose an extra copy of this form).			
— : ta/aa65 0:46;					onid issue fee to the application is	

(Authorized Signature)	(Date)
Kika Wilson	5/18/04
NOTE; The Issue Fee and Publication Fee (if requ	
other than the applicant; a registered attorney or	agent; or the assignee or other party it

interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual cuse. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

05/18/2004 WABRHAM2 00000154 131958 10618372

01 FC:1501 02 FC:1504 1330.00 DA 300.00 DA

## ORNL GEN PATENT COUNSEL

FACSIMILE

## OFFICE OF GENERAL COUNSEL /INTELLECTUAL PROPERTY SECTION OAK RIDGE NATIONAL LABORATORY

Managed by UT-Battelle, LLC

Post Office Box 2008 ●111-B Union Valley Road • Oak Ridge, Tennessee 37831-6498

c,		Facsimile No.: (865)	574-0381	
ÉTENTAT TO:	Mail St	Stop ISSUE FEE F	acsimile No: _	703,746.4000
10.	Comm	nissioner for Patents	erification Dat	e/Time: May 18, 2004
	Alexan	ndria, VA 22313-1450 T	ransmitting	2 Pages (including this cover)
FROM	: AT	TTORNEYS:		
	0	George L. Craig, Esq., Associate General Counsel-IP	, Telephone (865):	576-6883
		Judson R. Hightower, Esq., Associate General Couns	el, Telephone (865	5) 576-3767
	0	Stephen D. Hamel, Esq., Of Counsel, Intellectual Pro	perty, (865) 574-2	2229
	o	Elizabeth Warfield, Paralegal, Telephone (865) 576-03	321	
	a	Karen D. Drew, IP Paralegal, Telephone (865) 576-37	765	
		Karen E. Bowman, Administrative Assistant (865) 57	4-2219	
	AC	GENTS:		
	0	Joseph A. Marasco, Senior Patent Agent, Telephone	(865) 574-4178	
	G	Shelley L. Stafford, Patent Agent, Telephone (865) 5	76-7561	
		Kirk A. Wilson, Patent Agent, Telephone (865) 574-	4179	
	a	Jack Spicer, Patent Agent, Telephone (865) 574-4180	•	

## **REMARKS:**

----

The information contained in this facsimile is attorney-client privileged and confidential and is intended for the use of the individual or entity named above. If the reader of this message is not the intended recipient (or the employee or agent responsible to deliver it to the intended recipient), you are hereby notified that any reproduction, dissemination, or disclosure of this communication is prohibited. If you have received this communication in error, please notify us by collected telephone, return the original message to us at the address shown at our expense, and destroy any copy of the message remaining in your possession.